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Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents



UNITED SEES DEPARTMENT OF COMMERCE
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Washington, D.C. 20231

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 29

Application Number: 08/549,322

Filing Date: 10/27/95

Appellant(s): Pennetreau et al

Schneller
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed 3/30/98.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because not one argument is presented which relates to limitations not included by claim 1.

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Art Unit:

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,008,474 Wairaevens et al 4/1991

WO/8,912,614 Rao . 12/1989

Lovelace, Aliphatic Fluorine Compounds (1958) pp 12-14

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Wairaevens et al disclose a liquid phase process wherein vinylidene chloride is reacted with HF in the presence of a liquid medium which is a saturated halogen containing hydrocarbon under conditions of temperature and pressure included by the instantly claimed process and further discloses the relative amounts of solvent and reactants required by the instant claims. (See the claims and Examples)

Wairaevens et al differ from the instantly claimed process only in the use of a different and analogous starting material.

The application of the old process of Wairaevens et al to the analogous starting material of the instantly claimed process to obtain a result consistent with the teaching of Wairaevens et al would have been obvious to one of ordinary skill in the art.

The starting material of the claimed process and that of Wairaevens et al are analogous in that both are chlorine containing olefins wherein the chloro group is adjacent to the unsaturation.

The result obtained by Wairaevens et al is consistent with the result obtained by the claimed process in that in both cases a fluorine group replaces one chloro group and a saturated product is produced.

The motivation for using the analogous starting material of the claimed process in the Wairaevens et al process is derived from the reasonable expectation of obtaining a known useful product.

The disclosure of Rao illustrates the fact that the starting materials are analogous in that vinyl chloride and vinylidene chloride are both preferred starting materials in a similar liquid phase reaction with HF to produce analogous products. (col. 3, lines 6+).

Lovelace discloses the reaction of vinyl chloride with HF to produce 1-chloro-1-fluoroethane and indicates that the use of excess HF will result in the 1,1-difluoroethane product. Thus, Lovelace supports what would be immediately apparent to one of ordinary skill in the art that vinyl chloride is analogous to vinylidene chloride in typical hydrofluorination procedures.

Furthermore, In re Ochiai, 37 USPQ2d 1127 (Fed. Cir. 1995), supports the instant rejection in stating "the Board erred in upholding the examiner's rejection...when neither the particular cephem produced is either taught or suggested by the art that predates the parent application". It is clear therefore, that in the instant situation where both the produced and the starting material utilized were both "taught or suggested by the art that predates the parent application" that the reasoning in In re Ochiai for reversing the Board does not apply.

(11) Response to Argument

The primary reference discloses a process wherein vinylidene chloride reacts in a similar manner with HF to produce the corresponding products. It is not necessary that vinylidene chloride and vinyl chloride behave identically in all situations for the instantly claimed process to be suggested from the disclosure of Wairaevens et al. It is clear that both starting materials are vinyl chlorides containing a carbon atom unsubstituted with chlorine and a carbon atom substituted with chlorine and that both materials react with the HF to produce the corresponding saturated chlorofluoro derivative. The structure of the starting materials are clearly close enough that one of ordinary skill in the art would have had a reasonable expectation that they would have behaved similarly when reacted with HF.

The solvent present in the instantly claimed process reads on and includes the product produced and it is clear that at some point in the reaction the claimed amount of product would be present in the reaction zone.

Rao clearly establishes that vinyl chloride and vinylidene chloride would be expected to react similarly with HF.

The motivation for utilizing vinylidene chloride in the process of the primary reference is derived from the reasonable expectation of obtaining a known useful product and from the fact that the chemistry involved, namely addition of HF across the double bond of an olefin, is well known to be applicable to a wide range of starting materials.

The declaration of Francine Janssens under 37 C.F.R. 1.132 (paper No. 7) is not deemed persuasive. The instant rejection is not predicated upon the assumption that vinyl chloride and vinylidene chloride are identical reactants but only that there would have been a reasonable expectation that some useful analogous product would be obtained. This expectation is confirmed by the showing in said declaration. Furthermore, the exemplified process of the primary reference has not been compared to the process of the instant claims and therefore the showing is not comparative with regard to yields obtained. It is clear that the conditions resulting in optimum yield for the prior art starting material would be those utilized in the prior art examples. The use of other conditions, presumably optimum for the instantly claimed starting material, is not justified since the instantly claimed process does not distinguish over the prior art in this regard. One of ordinary skill in the art would expect different optimum conditions even for starting materials as closely related as vinyl chloride and vinylidene chloride.

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The declarant urges that "there is no reasonable expectation of obtaining a known useful

product with high selectivity when replacing the vinylidene chloride starting material with vinyl

chloride". However, Rao clearly discloses a similar liquid phase reaction with HF wherein both

vinyl chloride and vinylidene chloride are utilized to produce analogous products. Thus, the prior

art establishes a reasonable expectation which would have motivated one of ordinary skill in the

art.

The instant rejection does not require the same reactivity or yield for vinyl chloride and

vinylidene chloride and it is axiomatic that different starting materials would result in different

product distributions and yields. It would be obvious to one of ordinary skill in the art that

different optimum reaction conditions would apply to different starting materials.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

AMS June 29, 1998

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